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Ms. Gita Kapahi Chief SWRCB Bay Delta/Special Projects Unit 1001 I Street, 14th Floor Sacramento, California 95812-2000

Southern Delta Salinity Workshop

Dear Ms. Kapahi

Enclosed please find an original and ten copies of the comments of the Kern County Water Agency on the Southern Delta Salinity Workshop, scheduled for January 16 and 19, 2007. Thank you for your consideration of these comments. If you have any questions, please feel free to contact us.

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Sincerely,

KRONICK, MOSKOVITZ, TIEDEMANN & GIRARD A Law Corporation CLIFFORD W. SCHULZ HANSPETER WALTER

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OPENING STATEMENT OF THE KERN COUNTY WATER AGENCY FOR THE STATE WATER RESOURCES CONTROL BOARD'S CONSIDERATION OF SALINITY OBJECTIVES FOR THE SOUTH DELTA

(Presented January 16, 2007)

Introduction

Today the State Board begins what the Kern County Water Agency hopes will be a one or two year process to seriously and scientifically reexamine the facts and mythologies that surround the agricultural salinity needs and rights in the southern portion of the Sacramento-San Joaquin Delta. This process needs to consider not only the water quality requirements of crops now grown in the southern Delta, but also the history of the region's water supply and irrigated agriculture, the causes of salinity degradation, and the logical cures for any impairments.

Fifteen or twenty years or more has passed since southern Delta salinity has been rigorously examined. During that time far more sophisticated tools have been developed to study Delta hydrology and how salinity moves and is concentrated. Further, better scientific techniques have been developed to measure crop responses to salinity and to manage salt buildup. These tools now need to be applied specifically to the southern Delta channels, soils, and crops. This work should be done by independent scientists. This will take time and this first workshop should be viewed only as the beginning of the effort. No one should believe that two days of workshops can provide the State Board with the kind of data that a serious evaluation will require.

In addition, since the State Board last considered the rights and needs of southern Delta farmers, two important judicial decisions have been penned by Justice Robie of the Third District Court of Appeal. These decisions will require the State Board to modify the way it procedurally and substantively approaches water quality control planning. In particular, the substantive rights and obligations of the parties to these ever-ongoing Delta hearings have been clarified in several important respects.

This opening statement will first describe the legal backdrop. It will then focus on the fact development process that we believe is required to ascertain if proposed water quality objectives will provide a reasonable level of protection to the agricultural beneficial use and how best to implement those objectives.

Legal Background

Often, one hears the over-simplistic statement that the Porter-Cologne Act (Water Code section 13000 et seq.) mandates that the State Board identify the water quality that will fully protect the identified beneficial use (in this case agricultural irrigation) and then establish a program to ensure that such water quality is achieved. In reality, the statutory guidelines and the task of applying them are far more complex, and involve, like all exercises of this type, crafting a reasonable balance between competing needs.

Water Code sections 13240 and 13241 define the balancing process as follows:

13240. Each regional board shall formulate and adopt water quality control plans for all areas within the region. Such plans shall conform to the policies set forth in Chapter 1 (commencing with Section 13000) of this division and any state policy for water quality control.

13241. Each regional board shall establish such water quality objectives in water quality control plans as in its judgment will ensure the reasonable protection of beneficial uses and the prevention of nuisance; however, it is recognized that it may be possible for the quality of water to be changed to some degree without unreasonably affecting beneficial uses. Factors to be considered by a regional board in establishing water quality objectives shall include, but not necessarily be limited to, all of the following:

- (a) Past, present, and probable future beneficial uses of water.
- (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
- (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
- (d) Economic considerations.
- (e) The need for developing housing within the region.
- (f) The need to develop and use recycled water. (Italics added.)

Water Code section 13000 sets out the primary policy referred to in section 13240:

The Legislature finds and declares that the people of the state have a primary interest in the conservation, control, and utilization of the water resources of the state, and that the quality of all the waters of the state shall be protected for use and enjoyment by the people of the state

The Legislature further finds and declares that activities and factors which may affect the quality of the waters of the state shall be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible. (Italics added.)

Thus, clearly, salinity objectives for southern Delta agriculture must be established with reference to (i) past, present, and probable future uses of the water, (ii) the quality of the water available, (iii) statewide economic considerations, and (iv) the competing demands for water for all beneficial uses inside and outside the Delta. All of this information is required to determine if a proposed objective meets the statutorily mandated reasonableness criterion.

The importance of balance and reasonableness was highlighted by the recent Third District Court of Appeal opinion in the *State Water Resources Control Board Cases* (2006) 136 Cal.App.4th 674. There, in reviewing water rights Decision 1641, the Court of Appeal was faced with a contention by the State Board that "[n]othing in the Porter-Cologne Act mandates the Board to adopt all of the flow-dependent objectives in a water quality control plan when it issues a water right decision." In this case, the State Board had argued that it was only required to consider such objectives; and was not required to implement them. The Court of Appeal disagreed:

Section 13247 – part of the Porter-Cologne Act – provides that "[s]tate offices, departments, and boards, in carrying out activities which may affect water quality, shall comply with water quality control plans approved or adopted by the state board unless otherwise directed or authorized by statute" (Italics added.) Here, in the plan of implementation in the 1995 Bay-Delta Plan, the Board

specifically stated that "[t]he water right decision ... will allocate responsibility for meeting the [water supplyrelated] objectives among water rights holders in the Bay-Delta Estuary watershed" (1995 Bay-Delta Plan, p. 27, italics added.) Thus, the 1995 Bay-Delta Plan specifically identified this water rights proceeding and Decision 1641 as the action "necessary to achieve the [river flow] objectives" of the 1995 Bay-Delta Plan, including the Vernalis pulse flow objective. (§ 13242, subd. (a).) Certainly, in conducting a water rights proceeding for the express purpose of allocating responsibility for meeting a water quality objective in a water quality control plan, the Board is "carrying out [an] activit[y] which may affect water quality." (§ 13247.) Accordingly, the Board was compelled by section 13247 to comply with the 1995 Bay-Delta Plan unless another statute authorized the Board not to comply with the plan. (136 Cal.App.4th 647, 730)

The implications of this ruling will, and must, alter the way the State Board approaches development of water quality objectives. Now, before the Board establishes a salinity or other objective that it expects to implement through water rights actions, it needs to consider and decide that the objective is capable, legally and practically, of being fully met by imposing terms and conditions on water rights permits. According to the Court of Appeal, Water Code section 13247 "compels" full implementation of that objective through water rights actions unless another statute authorizes a different result. Kern suggests that a water quality objective that is to be implemented solely through water rights actions, but which legally cannot be fully accomplished in that fashion or can only be fully accomplished by dramatically impacting other beneficial uses, *per se* fails the reasonable protection standard established by Water Code section 13241.

When evaluating whether a proposed Delta salinity objective meets the statutory reasonable protection standard, the *State Water Resources Control Board Cases*, and the even more recent decision in *El Dorado Irrigation District v. SWRCB* (2006) 142 Cal.App.4th 937, combine to articulate a second important rule that the State Board must factor into its planning process. In the *El Dorado* case, the Court of Appeal expressly addressed the issue of whether the area of origin statutes can be interpreted to require the State Water Project ("SWP") to release previously stored water to benefit in-basin water

users such as El Dorado. The answer was a resounding "no:"

In any event, ... section 11462 contradicts the trial court's conclusion that appropriators in an area of origin may assert a priority to water from that area that was properly stored by another in an earlier season. That statute provides that the area of origin statutes do not "require the department to furnish to any person without adequate compensation therefor any water made available by the construction of any works by the department."

This provision reveals that the Legislature did not intend to give users within an area of origin the right to water stored by the Department without paying for it. Since the burden of the area of origin provision in section 11460 falls as much on the Bureau as it does on the Department, there is no reason to believe the Legislature did not intend the Bureau to equally benefit from the provisions of section 11462. In other words, although El Dorado may be entitled to assert a priority under section 11460 over the Bureau and the Department to the diversion of water originating in the watershed of the South Fork American River, that priority does not extend to water the projects have properly diverted to storage at an earlier date. If El Dorado wants water properly stored by the projects, it must pay for it. (142 Cal.App.4th 937, 976)

Similarly, in the *State Water Resources Control Board Cases*, in response to claims by the Central Delta Water Agency, the Court of Appeal rejected the argument that the Delta Protection Act (Water Code section 12000 *et seq.*) required the SWP to provide stored water when necessary to meet the water quality needs of Delta diverters. The Court stated:

As for the argument of the Central Delta parties that the Delta Protection Act gives Delta riparians and appropriators a right to water stored upstream by others, we disagree. Nothing in the Delta Protection Act purports to grant any kind of water right to any particular party. (136 Cal.App.4th 647, 771-772)

After years of argument and counterargument by the various Delta parties, it is now clearly the law of this State that Delta water users, do not have the right to demand that the SWP provide water quality enhancements through stored water releases to those who have chosen to own and farm lands that are naturally prone, particularly in drier year types, to saline water conditions.

Kern is intentionally using the term "enhancements" to distinguish any obligation to mitigate significant impacts to Delta water quality that are caused by SWP operations from an improvement in water quality above that which would have existed if the SWP were not operating in the Delta. This distinction is in harmony with the State Board's recently adopted 2006 Delta Water Quality Control Plan, which states at page 3:

This plan establishes water quality control objectives for which implementation can be fully accomplished only if the State Water Board assigns some measure of responsibility to water right holders and water users to mitigate for the effects on the designated beneficial uses of their diversions and use of water. (Italics added.)

The State Board's recognition that the obligations of water rights holders are limited to mitigating their impacts meets the directives of the two recent Court of Appeal decisions and ensures that the owners and operators of upstream storage facilities are not required to subsidize riparians and appropriators in the Delta who may wish to lower their agricultural production costs by gaining artificial enhancements of their water quality from projects that are being financed by others. The Delta has always – from the day the first land reclamation occurred – been subject to the water quality vagaries that are inherent in a location so close to the ocean and at the mouth of the water course.

Fact Development

The statutory language and the referenced Court of Appeal decisions guide the type of factual issues that must be considered by the State Board as it considers whether a proposed southern Delta salinity objective is reasonable. Kern breaks factual issues into

¹ With the exception of those within the North Delta Water Agency, which had the foresight to sign an agreement with DWR for water quality services.

four separate, but related, areas of inquiry – (i) the natural water quality regimen, (ii) the crops that have been grown, are being grown, and may be grown in the south Delta and their salinity tolerance, (iii) the impacts on other beneficial uses of various levels of salinity protection, and (iv) determining the mitigation responsibilities, if any, of the SWP, CVP, and possibly other upstream water users.

1. Establish An Historic Baseline.

The State Board should develop data on the historic patterns of flow and water quality on which southern Delta agriculture was established. This information is central to determining what constitutes a reasonable level of protection and to establishing a baseline condition against which impacts and mitigation responsibilities, if any, of SWP operations can be measured.

Water Code section 13241(b), quoted above, requires the State Board, before it sets a water quality objective, to consider the "environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto." In this case the historic water quality that existed before the SWP was in place best describes the water quality (salinity level) that is available for diversion under the riparian and appropriative rights of Delta water users. Further, because we are dealing with a tidal estuary, those salinity levels vary widely from year to year and month to month, depending largely on the whims of mother nature. Yet, despite the natural variability demonstrated by the historical data, the existing southern Delta agricultural objectives are unique among the Delta agricultural water quality objectives in their failure to include *any* dry year relaxation provisions. In order to meet the statutory reasonableness criterion, a southern Delta salinity objective, like the other Delta agricultural objectives, should reflect the natural variations that are demonstrated by the historical record.

This need to recognize the natural variation in salinity is not a new and novel concept. In 1922, years before the CVP and SWP existed, the California Supreme Court in *Town of Antioch v. Williams Irrigation District* ((1922) 188 Cal. 451) was faced with a request for an injunction by the Town to stop upstream Sacramento River irrigators from

diverting water that reduced Delta outflow to a point where salinity intrusion from Suisun Bay made the Town's water supply too salty for domestic use. The Supreme Court rejected the requested relief, as follows:

The place where the river water meets and overcomes the inflowing tide is not fixed. It changes with the rise and fall of the rivers and tides. The tides vary in height. The rivers vary much more in their volume and height. Hence, it follows that where there is fresh water one day there may be salt water a week, or even a day, thereafter. At a point near to that meeting place, the diversions of the riparian owners, of which no complaint is here made, may change the character of the water at any time. Dry seasons advance the point of meeting farther up the stream, and wet seasons drive it farther into the bay. Any person who appropriates water from one of these rivers at a point near to that meeting of the waters must take notice of these conditions and his rights will necessarily be restricted thereby. He acts at his peril with regard to them. He must also take notice of the policy of our law, which undoubtedly favors in every possible manner the use of the waters of the streams for the purpose of irrigating the lands of the state to render them fertile and productive, and discourages and forbids every kind of unnecessary waste thereof.

The record in this case shows that in the extreme dry season in the year 1920 the flow of the river at the city of Sacramento was reduced to 420 second - feet, largely by the diversions of the defendants. The claim of the city of Antioch is that for its protection the flow at that point must be maintained at 3,500 second - feet. In effect, therefore, its claim is that 3,080 second - feet of water otherwise available for irrigation above must at all times be kept flowing down the river into the bay, without any other beneficial use whatever, in order that the city of Antioch may be able to take less than one second - foot of fresh water therefrom at its pumping plant near the mouth of one of the rivers. Not only this, but, if its claim is allowed, every other prior user of water who takes it out near to the meeting place of the waters must be allowed the same right. And as the close proximity of the place of diversion to the meeting of the waters would not divest or affect the right as against subsequent appropriators above, one whose pump was a hundred yards above the highest known rise of the salt water would have the right to keep practically the entire

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river flowing down to his pump so as to keep the salt water therefrom. Thus a single appropriator of water for the domestic use of one family, taking probably less than a fiftieth part of a second - foot of fresh water for actual use, would, in practical results, appropriate or control 3,080 second-feet of water of the river to supply his pipe with that infinitesimal quantity, and in that way he would keep more than 300,000 acres of fertile land in the valley above dry and unproductive. By a valid appropriation of one miner's inch he would, in effect, appropriate all the water flowing in both of these large rivers. It would be hard to conceive of a greater waste for so small a benefit.... (188 Cal. 451, 460; Italics added.)

By evaluating the historic flows and water quality, the State Board can begin the task of determining if and when relaxations of the objectives may be reasonable and also develop data that will aid the investigations related to export project impacts, if any, on otherwise existing salinity conditions. This type of data will also allow the State Board to comply with Water Code section 13241(b).

This historic data is available from many sources. For example, in 1931, the State of California, published, for that era, a monumental work detailing historic salinity patterns in the Delta and the responses of irrigators to the annual influxes of salinity which has been magnified by the growth of upstream irrigation uses. Bulletin 27 contains pages and pages of tables that show, from year to year and within each individual year during the 1920s, the flows and resulting salinity levels in the Delta. These early years are essential to a reasonableness evaluation, as the data is not clouded by operation of the CVP or SWP. In particular, data from 1926 (a dry year under both the Sacramento River 40-30-30 and San Joaquin River 60-20-20 formulas) and 1931 (a critical year under those formulas) indicate how much salinity varied in the drier years and how the farmers responded. Kern will continue to develop historic data and urges the State Board to consider these types of analyses in its deliberations.

2. Reexamine The 1978 and 1990 Agricultural Salinity tolerance Materials And Update Them With More Current Studies That Focus On Southern Delta Conditions.

The earlier southern Delta salinity workshops and the CDO proceedings were filled with conflicting opinions concerning the outcome of the studies that began over thirty years ago to ascertain the salt tolerance of key crops grown in the Delta. Attempts to introduce more recent scientific information that suggested gaps and/or errors in the earlier studies were met with objections that they did not focus on or reflect actual field conditions in the southern Delta. In particular, there was debate concerning how rainfall was or was not considered and whether the tighter soils and higher water tables in the southern Delta were taken into account.

Kern has begun to review the earlier reports and finds that most focused on the needs of corn grown in the peat-soil areas of the Delta. The southern Delta is predominantly mineral soils that are surface irrigated. Therefore, these peat-soil studies, while somewhat relevant to the issue of how a crop responds to the salinity levels in the soil water extract (EC_{SW}), are not relevant for determining the ratio of irrigation water salinity (EC_W) to the EC of the soil water extract. There were, however, several field studies in the southern Delta, including a 1976 study by Myer et al., that looked at nine locations in the southern Delta that were growing alfalfa, winter oats, summer corn, tomatoes, sugar beets, and walnuts.

In May, 1991, fifteen years after the studies were completed, the State Board, in its "Water Quality Control Plan For Salinity," established a 0.7/1.0 EC salinity objective for the southern Delta. However, the staff analysis set out in the Plan contains the following statement:

In developing objectives for beans and alfalfa, the evidence and exhibits from the Phase I hearing, information from the DWR-sponsored South Delta Agricultural Workgroup, and the southern Delta negotiations were taken into consideration.

Within the subworkgroup, three key issues were discussed that influence the level of salinity required for the protection of beans and alfalfa: crop response during the early stages of growth, the determinations of leaching fractions, and the effectiveness of rainfall in reducing soil salinity during the irrigation season. The members of the subworkgroup have been unable to reach consensus. Consequently, the State Board has decided to base its analysis ... on the University of California's "Guidelines for The Interpretation of Water Quality for Agriculture", and the Delta Plan. (1978, Delta Plan, UC ex. D)

As far as Kern knows, there has been no change in the status of the studies or in the lack of consensus among the involved parties. Yet, there have been new studies and a continuing debate over the conclusions reached through the earlier work that was left unresolved in the early 1990s. These current proceedings are the place to review the data, evaluate whether the 30-year old studies meet current scientific standards, and perhaps even reach consensus on the land, water, and crop management questions that were left unresolved.

Kern believes that the measuring period for the southern Delta salinity objectives should be one of the issues reviewed. Currently, it is a running 30-day average. From the earlier studies, it appears that the ratio of EC_w to EC_{sw} is based on the average quality of the applied irrigation water over the entire growing season. The studies also suggest that some of the important crops may be less salt tolerant at the seedling stage and more tolerant later in the growing season. Thus, if an EC less than the selected objective is provided in the spring when natural patterns of river flow often provide better quality water, it may be possible to establish objectives that more closely mimic the natural seasonal patterns of salinity in the Delta (fresher in the Spring and more saline in the summer and fall) by allowing salinities to exceed, for example, 0.7 in the late summer as long as the average over the growing season does not exceed the objective.

As can be seen from the preceding paragraph, Kern is not, at this time, contending that 0.7 EC is an incorrect objective. Instead, we are asking that this objective be scientifically reviewed because many questions were left open in the past. If it turns out that the objective is unnecessarily low, it can be revised. Even if it stays the same, there

may be better ways of measuring compliance that reflect natural inter-monthly salinity variations, which are closely related to the ability of water flows and/or water rights actions to meet the current objectives in the low-flow summer months.

Kern strongly recommends that the State Board retain independent experts to review the earlier studies, develop a methodology for updating that information, and carry out southern Delta-specific studies that will address the existing uncertainties. To avoid unnecessary effort and expenses, the initial work should encompass a review of what is presently available and a recommendation to the State Board and the interested parties as to the gaps or uncertainties that need further work. A workgroup of the type referred to in the 1991 Plan referenced above could be established to provide guidance to the independent experts.

3. <u>Determine The Effects of SWP Operations On Salinity Levels In The</u> Southern Delta.

As noted earlier in this statement, one purpose of these southern Delta proceedings should be to determine to what extent holders of water rights should be required "to mitigate for the effects on the designated beneficial uses of their diversions and use of water." During the 1995 water quality planning process and the hearing that led to Decision 1641, language crept into both the plan and the decision that Kern believes has little or no basis in fact, but which if accepted would support an SWP mitigation obligation. For example, in the 1995 Water Quality Control Plan, the State Board found:

Elevated salinity in the southern Delta is caused by low flows, salts imported in irrigation water by the State and federal water projects, and discharges of land-derived salts, primarily from agricultural drainage. (1995 Plan, page 29; Italics added.)

In Decision 1641, the State Board found:

Water quality in the southern Delta downstream of Vernalis is influenced by San Joaquin River inflow; tidal action; diversions of water by the SWP, CVP, and local water users; agricultural return flows; and channel capacity. (Decision 1641, page 86; Italics added.)

As to the first quoted statement, the SWP does deliver contract water into the San Joaquin River Basin. All deliveries of SWP water within the Central Valley are south of the San Joaquin River watershed. This southern Delta salinity review finally provides Kern and the other SWP contractors an opportunity to correctly and more precisely state the causes of salt loading into the San Joaquin River. Kern, in cooperation with DWR, will provide precise data on this topic, because a correct analysis is central to determining if the SWP has a mitigation obligation to maintain certain salinity conditions in the southern Delta.

Kern believes that the State Board must evaluate the salt loading problems on the San Joaquin River upstream from Vernalis in order to determine what is a reasonable salinity objective for the southern Delta. Further, without such information, the State Board will likely be unable to fashion a successful implementation program that is aimed at the proper parties. Since the SWP is not a contributor of any significant level of salts to the San Joaquin River, a mitigation responsibility for salt loading should not exist.²

As to the second quoted paragraph, along with DWR, Kern believes that the statement that SWP pumping degrades southern Delta water quality is without technical support. Once again, the truth of the statement, or the lack thereof, is central to the allocation of responsibility to mitigate impacts on water quality. Primarily relying on DWR, Kern will be urging that the State Board's revised water quality plan for southern Delta salinity accurately recite the extent and nature of the effects of SWP Delta operations on salinity in the region. In many cases, we believe the State Board will find that those operations actually improve rather than degrade the situation.

4. The Impact Of South Delta Salinity Objectives On Other Beneficial Uses.

Perhaps the most difficult aspect of setting southern Delta salinity objectives is determining reasonableness. As noted in the legal introduction to this statement, Judge Robie's opinion on Decision 1641 clearly holds that a water quality objective that the State Board designates for implementation solely pursuant to the Board's water rights

² Kern is not saying that DWR should not participate in the efforts to reduce salinity in the upper San Joaquin River. DWR should and will do so in its roll as a statewide water agency, rather than as the operator of the SWP. The issue is largely who pays rather than should DWR participate in the process.

authority must be fully implemented through the water rights process. The Board does not have the authority to decline to fully implement the objective, only to go back and amend the objective in a new water quality proceeding. This ruling makes it very important that the State Board, once the mitigation responsibilities of water rights holders have been determined, consider (i) whether it has the authority to further implement the objective through water rights orders and (ii) the impact on other beneficial uses of the water of trying to fully implement the objective through such orders. If a program of implementation cannot be developed that complies with the Court of Appeal decisions and avoids unreasonable impacts on other beneficial uses, either the program of implementation needs to be revised or the objective itself is unreasonable.

There seems to be consensus that trying to meet the objectives by pumping cessations or releases of stored water from the Sacramento River into the northern Delta is no better then jousting at windmills – a futile effort. Nevertheless, there is language in the State Board's recent Cease and Desist Order against DWR and the USBR that may indicate that the State Board holds a contrary view. In ordering paragraph 4 (page 30) of the CDO, the State Board ruled:

Corrective actions [for threatened southern Delta salinity exceedances] may include but are not limited to additional releases from upstream Central Valley Project (CVP) facilities or south of the Delta State Water Project (SWP) or CVP facilities, modification in the timing of releases from Project facilities, reduction in exports,

This reference to releases from upstream CVP reservoirs and a separate reference to similar releases south of the Delta, leads Kern to conclude that the Board may believe that such releases could both work and be reasonable. Therefore, Kern, in conjunction with DWR and other SWP contractors, will provide data on the water and dollar costs related to meeting the southern Delta objectives through storage releases or pumping curtailments.

In addition, southern Delta water users have suggested that there are other means for meeting the objectives that are reasonable and involve only actions in the Delta or on the San Joaquin River system. Kern, in conjunction with DWR and other SWP contractors, will develop information on the feasibility and cost of facilities such as low-

lift pumps or recirculation of Delta water down the San Joaquin River. These materials will not be limited to technical feasibility, but will also address issues such as the possible impacts on fishery resources of a recirculation program.

Further, to the extent such actions are not required to mitigate SWP impacts, issues of financial responsibility come to the forefront. If the southern Delta water users need better water quality than is reasonably provided by the natural flows that define their water rights, they do have the option of paying for the costs of an improved supply.

The South Delta Water Agency was formed for the primary purpose of entering into "one or more agreements with the United States and with the State of California" to assure the availability of a dependable water supply of adequate quality. (West Water Code Appendix, section 116-4-1) If the Agency's representatives believe that higher quality water is needed within the Agency's boundaries, it has the authority to contract with DWR to construct and operate, for example, low lift pumps if they believe they would work. What they cannot request is that, beyond mitigation, DWR (and therefore the SWP contractors) pay for the facilities needed to enhance their local water users' supplies. Kern believes that contracting for the infrastructure and/or water needed to reduce salinity levels may be an appropriate addition to the program of implementation. It would likely be a recommendation for appropriate action to another public agency (the South Delta Water Agency), as authorized by Water Code section 13242(a). The key here is that the State Board not impose a financial or water supply burden on third parties for implementation actions that should appropriately be borne by the benefited parties. In Kern's view, that would be unreasonable *per se*.

Conclusion

Southern Delta salinity is a complex topic that involves law, facts, and policy. Kern urges the Board to establish a reasonable schedule for completing the workshop and hearing phase of its deliberations that takes into account the need to bring consultants on board who can address the fundamental question of what irrigation water salinity is required to grow the crops now grown in the Delta with appropriate farm management practices in place. In addition, the effort involved in developing the model-runs and

baseline data that will tease out project impacts and mitigation responsibilities, if any, is not a simple process. However, these secondary tasks can easily be completed before the salt tolerance work can be finished. In other words, the rest of the fact development is not on the critical path.

Kern also reiterates its view that the State Board should retain an independent agricultural expert to do the required work. If that does not happen, the parties will each need to produce their own experts, which will be more contentious and expensive. Kern and other SWP contractors are willing to consider funding a Board expert if it relieves them of the equal or greater expense of hiring their own. We also recommend that a workgroup of the type established in the late 1980s be instituted for these proceedings.

Kern and the other SWP contractors will work diligently to bring to the State Board the best data currently available and we look forward to a long-needed final outcome that will withstand scientific and legal scrutiny yet protect the legitimate rights and expectations of both the southern Delta irrigators and the SWP and its contractors.